

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-4. (Canceled)

5. (Currently amended) The composition polypeptide according to claim 48, wherein the EGF-like repeat comprises at least one polypeptide repeat consisting of the amino acid sequence set forth in SEQ ID NO:26CX₃CX₅CX₅CXCX₈CX₄ where C is cysteine and X is any amino acid.

6-7. (Canceled)

8. (Currently amended) A composition for maintaining pluripotency without differentiating a stem cell, comprising:

an isolated polypeptide having a WIF domain and an EGF-like repeat; and
an isolated stem cell survival agent that is selected from the group consisting of
stem cell factor (SCF), Flt-3 ligand (FL) and thrombopoietin (TPO),

wherein the polypeptide having said WIF domain comprises a polypeptide
selected from the group consisting of:

(a) a polypeptide consisting of the amino acid sequence set forth in
SEQ ID NO:4,

(b) a WIF domain polypeptide consisting of a sequence of at least 100,
110, 120, 130, 140 or 150 amino acids of the amino acid sequence set forth in SEQ ID NO:4,
wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell
without differentiating the stem cell,

(c) a WIF domain polypeptide comprising an amino acid sequence that is derived from the amino acid sequence set forth in SEQ ID NO:4 by substitution, deletion or addition of 1 to 10 amino acids therein, wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell without differentiating the stem cell, and

(d) a WIF domain polypeptide comprising an amino acid sequence that is derived from the polypeptide of (b) by substitution, deletion or addition of 1 to 10 amino acids therein, wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell without differentiating the stem cell.

9-11. (Canceled)

12. (Original) The composition according to claim 8, wherein the stem cell survival agent is stem cell factor (SCF).

13-86. (Canceled) A stem cell which does not differentiate *in vitro* and maintains pluripotency.

87. (New) The composition of claim 8, wherein the stem cell is a hematopoietic stem cell.

88. (New) A method of maintaining pluripotency of a stem cell without inducing differentiation, comprising:

(1) providing, to a stem cell, an isolated polypeptide having a WIF domain and an EGF-like repeat, wherein the polypeptide having said WIF domain comprises a polypeptide selected from the group consisting of:

(a) a polypeptide consisting of the amino acid sequence set forth in SEQ ID NO:4,

(b) a WIF domain polypeptide consisting of a sequence of at least 100, 110, 120, 130, 140 or 150 amino acids of the amino acid sequence set forth in SEQ ID

NO:4, wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell without differentiating the stem cell,

_____ (c) a WIF domain polypeptide comprising an amino acid sequence that is derived from the amino acid sequence set forth in SEQ ID NO:4 by substitution, deletion or addition of 1 to 10 amino acids therein, wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell without differentiating the stem cell, and

_____ (d) a WIF domain polypeptide comprising an amino acid sequence that is derived from the polypeptide of (b) by substitution, deletion or addition of 1 to 10 amino acids therein, wherein said WIF domain polypeptide is capable of maintaining pluripotency of a stem cell without differentiating the stem cell; and

_____ (2) providing, to the stem cell of (1), an isolated stem cell survival agent that is selected from the group consisting of stem cell factor (SCF), Flt-3 ligand (FL) and thrombopoietin (TPO), and thereby maintaining pluripotency of the stem cell without inducing differentiation.

89. (New) The method of claim 88, wherein the stem cell survival agent is stem cell factor (SCF).

90. (New) The method of claim 88, wherein the stem cell is a hematopoietic stem cell.